

## PROCESS FOR THE DIRECT SYNTHESIS OF ALKYLHALOSILANES

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## ABSTRACT

Process for the preparation of alkylhalosilanes by reaction of an alkyl halide, preferably  $\text{CH}_3\text{Cl}$ , with a solid body, referred to as contact body, formed of silicon and of a catalytic system comprising ( $\alpha$ ) a copper catalyst and ( $\beta$ ) a group of promoting additives comprising:

- an additive  $\beta 1$  chosen from metallic zinc, a zinc-based compound and a mixture of these entities,
- an additive  $\beta 2$  chosen from tin, a tin-based compound and a mixture of these entities,
- optionally an additive  $\beta 3$  chosen from cesium, potassium, rubidium, a compound derived from these metals and a mixture of these entities,

said direct synthesis process being characterized by the following points, taken in combination:

- the copper catalyst ( $\alpha$ ) is in the form of metallic copper, of a copper halide or of a mixture of these entities,
- the contact body additionally includes a supplementary promoting additive  $\beta 4$  chosen from a derivative of an acid of phosphorus and a mixture of these entities.